

## BURNET PROJECT

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**SUMMARY.** The BurNet project, a pilot project of the Eumedis initiative, has become true. The Eumedis (EUro MEDiterranean Information Society) initiative is part of the MEDA programme of the EU to develop the Information Society in the Mediterranean area. In the health care sector, the objective of Eumedis is: the deployment of network-based solutions to interconnect - using user-friendly and affordable solutions - the actors at all levels of the "health care system" of the Euro-Mediterranean region. The BurNet project interconnects 17 Burn Centres (BC) in the Mediterranean Area through an information network both to standardize courses of action in the field of prevention, treatment, and functional and psychological rehabilitation of burn patients and to coordinate interactions between BC and emergency rooms in peripheral hospitals using training/information activities and telemedicine to optimize first aid provided to burn patients before referral to a BC. Shared procedure protocols for prevention and the care and rehabilitation of patients, both at individual and mass level, will help to create an international specialized database and a Web-based teleconsultation system.

In 1999 the European Commission approved a comprehensive regional MEDA initiative for the development of the Euro-Mediterranean Information Society specifically designed to reduce the region's informational and technological gap vis-à-vis the neighbouring countries.

The *EUMEDIS initiative* aims at interconnecting the Euro-Mediterranean research communities and at launching pilot projects in five priority sectors of intervention:

- Information and Communication Technologies applied to Education
- Electronic Commerce and Economic Cooperation
- Healthcare Networks
- Multimedia Access to Cultural Heritage and Tourism
- Information and Communication Technologies applied in Industry and Innovation

Planning for the BurNet Project started in 2002 as part of this Eumedis programme. During the following three years of its implementation, many changes in technological possibilities were evaluated and adopted into the project. Among all the Eumedis Projects sponsored by the European Commission, BurNet was the only one dealing with treatment and the prevention of burns and fire disasters. Naturally, the Mediterranean Council for Burns and Fire Disasters (MBC), with its extensive and long experience in this domain coupled with its capacity to diffuse knowledge in the Euro-Mediterranean area, was the most suitable candidate to develop this project.

17 Burn Centres - Scientific Partners, all members of

MBC, were initially involved in this project, each with a specific role in project improvement and development. The Scientific Partners included well-established Burns Centres in Algeria, Cyprus, Egypt, France, Jordan, Greece, Israel, Italy, Lebanon, Malta, Morocco, Syria, Spain, Tunisia, and Turkey.

### **BurNet Objectives: Training, Standardization of Burn Treatment, and Burn Prevention**

The Project's general objectives are:

- To interconnect Burns Centres (BC) in Partner countries in the Mediterranean area by means of an internet network in order to create standard approaches in the sector of burns prevention and treatment and in the functional and psychological recovery of burn patients.
- To coordinate interactions between BC and Emergency Treatment Centres in peripheral hospitals through training and information activities in order to optimize immediate health treatment for burn patients before transfer to a BC.
- In the case of mass burns, to permit the coordination of emergency activities between the various BC, and between the latter and peripheral hospital and other units operating in the sector.
- To create a specialized international data bank and a system of tele-consultation via the Internet.

Ultimately, the Project aims by activating an effective

prevention campaign in every country at decreasing the number of burn accidents in the Euro-Mediterranean area. This aim can be achieved, using information and training material that is above all appropriate to the customs and practices of the various communities.

The Project aims also at training all those who first arrive at the accident scene to administer immediate assistance to burn patients that must be treated within an extremely short period of time. These include all personnel specifically involved in generic medical assistance (family doctors, nurses), or paramedical personnel in charge of rescue and transportation, or public safety services (fire brigade, police, voluntary workers), or ordinary members of the public who act out of a spirit of human solidarity - educating the public not only how to immediately assist burn victims but also to secure their own safety is part of the training programme as well.

Training involves also emergency physicians and nurses working in emergency and immediate treatment facilities or in peripheral hospitals located at some distance from a burn centre. This permits the optimization of immediate medical care of burn victims. It also permits the standardization of treatment modalities in these facilities by following a common treatment protocol. Burnet training courses include organizational aspects in the event of a major fire disaster.

### BurNet Web Portal

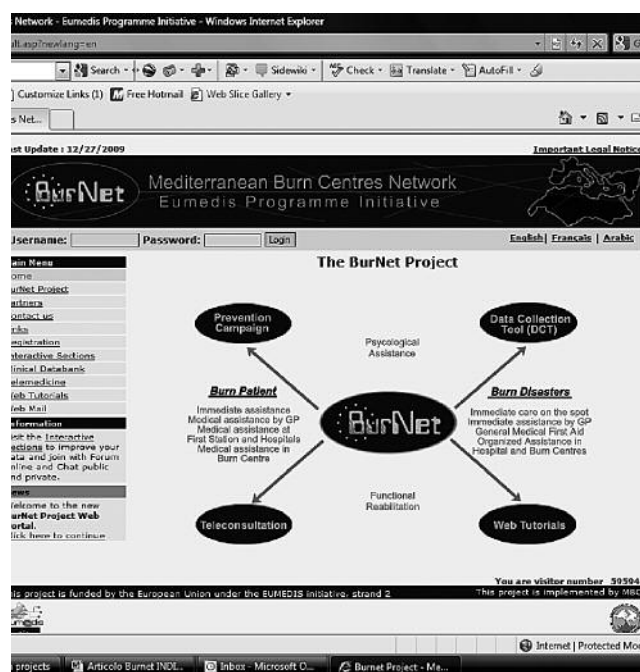
The creation of the official web-portal [www.burnet.org](http://www.burnet.org) initiated the practical aspect of the Project. Through the web portal ordinary people are enabled to learn about burns pathophysiology and treatment. Schools and other Public Institutions can find in the web useful tools to start an efficient prevention campaign or to establish an Emergency Ward in a peripheral area. Consultation with a specialized BC or a BC partner is also possible through the web portal, as well as sharing data and advising through clinical files and a common data bank.

#### Home page of the BurNet web portal

The operational steps of the project are as follows:

- Definition and implementation of existing technological structures
- Web Portal
- Online exchanges of scientific knowledge and teleconsultation
- Dissemination of results

The definition and implementation of existing technological structures was realized with the Project by providing all Partner Centres with a "technological kit" for setting up Internet links. This allowed equal operational lev-



els among the Partners on the network linking BC in the Euro-Mediterranean area facilitating contacts and exchanges between drastically different facilities that are geographically widely dispersed.

The construction of a Web Portal put at the Scientific Partners' disposal a cheap and direct instrument that facilitated communication between them. It allowed exchange of know-how, performance of telediagnosis, and teleconsultations. The Portal was available initially in three languages: English, French, and Arabic. A Turkish version was lately instituted for internal use, thanks to the initiative of the Turkish Partner. The address of the Turkish site is: <http://www.turkburnet.org>

### BurNet Tools

The creation of the Portal made it possible to put the following Tools on line:

**Data Collection Tool (DCT):** When completed, this will establish the largest computerized archive and data bank in the field of burn treatment and prevention and will be useful for future epidemiological studies and research.

**Forum:** This is an electronic notice board where users can write messages related to topics already proposed by the Forum Administrator (e.g. members of the Scientific Committee). Every user can reply or comment on a topic that is already present or suggest a new subject. Access to the service is simple and well signposted by the Discussion Groups icon that is present in every section.

**Chat:** This instrument permits written communication

in real time between two or more users who at that particular moment are connected to the Portal. A Chat can be held at any time the Administrator thinks it is necessary, after an e-mail announcement. Discussions on specific points can be held, in which all users are invited to take part. The topics calendar is published on a periodical basis.

*News and Events:* This is a showcase where dates and information regarding BurNet Project topics are displayed. Clicking a single event causes further information to be displayed, or the user is directed to the official site. The Manager of News and Events is the MBC, which reports the information and suggestions it receives from all the Partners.

*Document Repository:* This useful instrument is for the collection of scientific publications and documentation concerning BurNet subjects. It can be consulted by all registered users and constitutes an important bibliographical instrument that has its own index and is easily accessible. The contents have links with the various sections of the Portal in order to have in-depth information about topics treated elsewhere (see Forum, Web Tutorials, etc.). Scientific publications can be suggested by users after careful evaluation by the Administrator. The process of users inserting their own scientific publications in the relevant sections is underway. The quarterly journal *Annals of Burns and Fire Disasters* is responsible for transferring to Document Repository the articles published in its 24 volumes and for creating a link. There are sections for doctors and medical staff, paramedical personnel, emergency service staff, ordinary members of the public, and schools.

#### *Online exchanges of scientific knowledge and Teleconsultation*

Today, the online exchange - in real time and between different countries - of knowledge and the results of research activity, the sharing of treatment protocols, and the use of teleconsultation are proving to be of fundamental importance for the growth of the world of medicine. BC personnel and all operatives in the medical and emergency action sector are enabled, thanks to BurNet, to use a high-speciality site, a Data Bank for teleconsultation, and the various continuously updated teaching modules that have been produced.

#### *Online courses (web tutorials)*

The purpose of the online courses, or web tutorials, is to promote the growth of the knowledge and capacities of operatives in the sector. The training modules, which can be accessed directly on the web site, involve the various professional skills engaged in the sector of burns and fire disasters, e.g. fire brigade, voluntary workers, ambulance personnel, general doctors, etc. Thanks to these instruments it has been possible to organize public awareness campaigns on problems related to burn accidents and fire disasters.

#### *List of online courses on the BurNet web portal:*

- Planning and Management - Fire Disaster and Burn Disaster
- Immediate Assistance
- Medical First Aid
- Psychological Support
- Functional Recovery
- Burn Prevention Campaigns
- Clinical File and Protocol for General Doctors Assisting Burn Patients
- Medical Assistance at First-aid Stations and Non-specialized Hospitals
- Medical Treatment of Burned Patients in Burn Centres
- Organized Medical Assistance On the Spot in Fire Disasters

#### *Prevention Campaign*

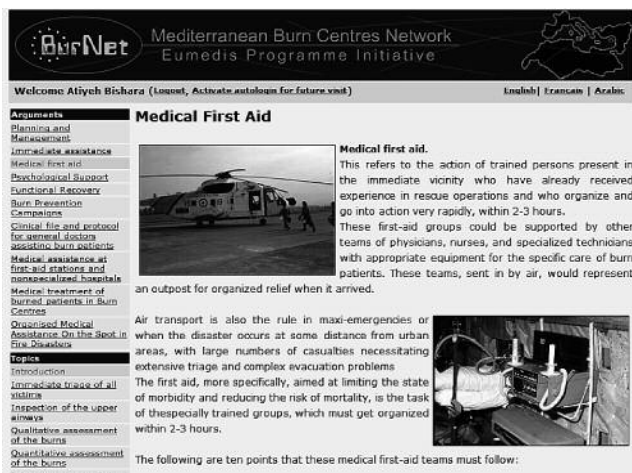
The most important step in prevention is education, which must be at a level the targeted population can understand. To capture children's interest and attention, BurNet devised some pleasant and enjoyable tools. The educational material includes posters and booklets. A special BurNet Prevention Campaign in cartoon and comic illustrations which is interesting and understandable by children 4-14 years of age was formulated. The booklet contains stories about all types of burn injuries that may occur during childhood daily activities inside or outside the home. It contains also useful advice for children's parents about how to react and what to do if a child gets burned. The booklet is freely available to all at [www.burnet.org](http://www.burnet.org)

#### *Dissemination of Results*

The final part of the Project started an activity of exchange of scientific material not only between BurNet Partners but also between them and other BC all over the world. To this regard it is noteworthy that the dissemination of results communicated by the various Partners in national and international conferences or through publications in specialized journals stimulated colleagues from other countries, even from outside the Mediterranean area, to ask to be associated in the Project. *In fact all are welcome to join and share the BurNet activities.*

*BurNet Today:* In addition to the 17 initial Partners, Portugal and Libya have officially joined the programme as Partners. Several other countries such as Austria and Serbia have become associated in the programme.

- 19 Burn Centres in the Euro-Mediterranean area were provided with advanced technology.
- 19 Burn Centres are concretely connected in a close and equal relationship of analysis and discussion on the pathological problem of burns.
- 19 Burn Centres are connected with their region's peripheral hospitals and emergency wards.
- There are many free online courses on first aid in burn



Example of web tutorial courses.

accidents, management of burn patients, and prevention.

- The Data Collection Tool will constitute the most extensive clinical file Data Base of burns. This may become a premise for the creation of a common clinical folder.

- The Web Portal [www.burnet.org](http://www.burnet.org) constitutes a cheap, accessible, and concrete instrument to participate in Forums and Discussion Groups, to use Scientific Library, and to provide an updated reference portal on meetings, congresses, and scientific innovations.

**RÉSUMÉ.** Le projet Burnet, un projet pilote de l'initiative Eumedis, est devenu réalité. L'initiative EUMEDIS (Euro Mediterranean Information Society) prend part au programme MEDA de l'UE pour développer la Société de l'Information dans la région méditerranéenne. Dans le secteur des soins sanitaires, l'objectif du programme Eumedis est: le déploiement de solutions basées sur le réseau pour interconnecter - en utilisant des solutions conviviales et abordables - les acteurs à tous les niveaux du "système des soins sanitaires" de la région euro-méditerranéenne. Le projet Burnet interconnecte 17 Centres des Brûlés (CB) dans la zone méditerranéenne à travers un réseau d'information qui sert à la fois pour standardiser les modalités d'action dans le secteur de la prévention, le traitement et la réadaptation fonctionnelle et psychologique des patients brûlés et pour co-ordonner l'interaction des CB et les services d'urgence dans les hôpitaux périphériques en utilisant des activités de formation/information et la télémedecine pour optimiser les premiers soins fournis aux patients brûlés avant le renvoi à un CB. Les protocoles partagés de procédure pour la prévention, les soins et la réadaptation des patients, au niveau soit individuel soit de masse, permettront de créer une base de données spécialisée internationale et un système de téléconsultation basé sur le Web.



Burn Prevention Comic Booklet freely available for reproduction and distribution at the BurNet web portal.

**THOUGH INITIALLY CREATED FOR EXCLUSIVE USE BY BURNS CENTRES IN THE MEDITERRANEAN COUNTRIES, THE BURNET PROJECT IS NOW OPEN TO ALL TO MAKE USE FREELY OF THE MATERIAL ALREADY POSTED AND TO SHARE THEIR EXPERIENCES BY CONTRIBUTING TO THE DATA COLLECTION TOOL AS WELL AS TO THE DOCUMENT REPOSITORY.**

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